

## STATEMENT OF WORK

### 1.0 SCOPE (General)

This Statement of Work describes the requirements for project execution and construction support services to be provided by the Contractor to the Ocean Construction Division, (Code 55), Naval Facilities Engineering Service Center. The emphasis of the required support will be for the inspection, installation, maintenance and repair of waterfront and ocean structures, moorings, pipelines, bridges, and cable-related projects throughout the world. This support may be required in the form of project management, economic impact studies or analysis, scheduling, feasibility studies, engineering analysis, facility designs, preparation of project plans and specifications, geotechnical and bathymetric surveys, underwater inspections, cable static and dynamic analysis, failure analysis and recovery of damaged structures; positioning and navigation services; installation planning, fabrication of project components; installation and repair of moorings and cable projects, provision of installation work platform(s), personnel and equipment, project logistical support, field inspection, quality control, preparation of project technical reports and drawings, preparation of required permit documentation, and preparation of bimonthly detailed (and summary) project cost and management progress reports.

The Contractor shall be able to provide sufficient workload management of personnel, facilities, and equipment at the time of contract award to meet the requirements of this contract. Technical competence of the Contractor for inspection, installation, maintenance and repair of waterfront and ocean structures, mooring, pipelines, bridge, and cable related projects construction, marine operations, and marine equipment utilized in mooring and cable projects is critically important.

This contract is an indefinite quantity contract. The specific services that the Contractor shall be required to provide shall be established by individual delivery orders to be issued by the Ordering Officer.

### 2.0 SERVICES REQUIRED

The Contractor shall furnish the required support at the times and places designated by the Ordering Officer. The Contractor will furnish such services in accordance with the individual statement of work prepared for each Delivery Order. The Contractor may be required to respond to a Delivery Order with as little as seven (7) days advance notice before the commencement of operations involving facilities and equipment and as little as twenty-four (24) hours advance notice for contingency or emergency operations requiring support personnel (i.e. craftsman, technicians, and engineers). Performance shall not commence without the issuance of a Delivery Order authorized by the Ordering Officer.

The Contractor shall provide all labor, equipment and facilities as required to perform the work as described in the individual delivery orders. Expected requirements of this contract shall include, but not be limited to the following typical project requirements:

#### 2.1 General Services (applicable to all project types)

- 2.1.1 Provide overall project planning, including workload, construction and installation planning
- 2.1.2 Provide on-site quality control personnel
- 2.1.3 Provide underwater and topside site surveys and inspections, including but not limited to bathymetric, side-scan, magnetic ROV and geotechnical survey services
- 2.1.4 Prepare preliminary environmental assessments (EA), preliminary environmental impact statements (EIS) and/or permit and compliance documentation as required
- 2.1.5 Prepare technical and economic feasibility studies,
- 2.1.6 Provide integrated surface and sub-sea positioning and navigation services
- 2.1.7 Provide services and equipment as required to support site survey, installation, repair, and maintenance operations
- 2.1.8 Provide engineering analysis to determine environmental loads, required structural capacity, foundation and anchoring requirements, erosion and scour mitigation measures, and system component structural, mechanical and electrical capacity
- 2.1.9 Provide design and fabrication of prototype components and installation equipment
- 2.1.10 Prepare and provide technical briefings

- 2.1.11 Prepare project reports; viewgraphs, photographs, drawings and other project related documentation
- 2.1.12 Preparation of design procedures manuals, project execution plans, project completion reports, inspection reports, material reports, and schedules
- 2.1.13 General presentation, reproduction, visual and graphical aids support
- 2.1.14 Preparation of plans and specifications
- 2.1.15 Preparation of cost estimates
- 2.1.16 Transportation handling, and inventory control of Government supplied materials
- 2.1.17 General port-side logistics support of at-sea operations to include: local port agents, local material storage and handling, consumable and repair parts, installation vessel berthing, fuel, water, power, communications, and offshore transportation services for personnel and material: (launches, cargo vessels, boats helicopters, etc.)
- 2.1.18 Provide installation vessels and platforms for use by integrated project teams that may include Contractor, NFESC, Naval Construction Forces and other government agency personnel.
- 2.1.19 Provide underwater quality control and photographic/video validation on all construction work and inspections performed as required.
- 2.2 Mooring Projects
  - 2.2.1 Anode, buoy, riser, riser fender, anchor and or mooring leg repair or replacement
  - 2.2.2 Mooring systems inspection, installation, pull testing and maintenance to include furnishing vessels, personnel and equipment
  - 2.2.3 Project material inventories and quality assurance checks
  - 2.2.4 Mooring buoy, anchor, and mooring accessory refurbishment
  - 2.2.5 Procurement and Fabrication of specially mooring materials
  - 2.2.6 Mooring system salvage and recovery
  - 2.2.7 Provide survey, navigation and position control systems and services for installation platforms
  - 2.2.8 Provide specialty moorings and cable installation equipment e.g.: pile driving equipment, pull test equipment, rigging materials, deck equipment: winches, air compressors, power systems, cranes, cable floats, storage bins, tensioners, launch ramps, mooring systems and thrusters
  - 2.2.9 Mooring System design and analysis
  - 2.2.10 Turn-key inspection, design, and installation of mooring facilities
- 2.3 Submarine Cable Projects
  - 2.3.1 Provide cable static and dynamic analysis
  - 2.3.2 Submarine cable system repair or replacement
  - 2.3.3 Ancillary submarine cable system equipment (buoys, anchors, transponder, repeater, haul down equipment, etc.) repair or replacement
  - 2.3.4 Shore crossing repair or replacement
  - 2.3.5 Submarine cable material inventories and quality assurance checks
  - 2.3.6 Submarine cable installation equipment fabrication, repair and maintenance
  - 2.3.7 Submarine cable equipment transportation, handling and storage
  - 2.3.8 Submarine cable system salvage and recovery
  - 2.3.9 Submarine cable system maintenance vessels, personnel and equipment
  - 2.3.10 Submarine cable systems shore crossing vessels, personnel and equipment
  - 2.3.11 Providing PC based software for cable real time installation analysis
- 2.4 Offshore Structure Projects
  - 2.4.1 Offshore structures Inspection, Maintenance, Repair and Rehabilitation design and analysis
  - 2.4.2 Offshore structures IMRR execution planning and cost control
  - 2.4.3 Provide offshore structures IMRR construction personnel, materials, and equipment e.g.: anodes, boat landings, handrails, stairways, Cathodic Protection Measurement, ultrasonic thickness, magnetic particle inspection, and paint thickness measurement equipment, vessels, cranes, winches, welders, riggers, painters, etc.
- 2.5 Waterfront Structure Projects
  - 2.5.1 Design repairs to waterfront structures
  - 2.5.2 Conduct repairs to waterfront structures

- 2.5.3 Turn-key inspection, design, and repair of waterfront structures
- 2.6 Bridge Projects
  - 2.6.1 Design of bridge repairs
  - 2.6.2 Conduct bridge repairs
  - 2.6.3 Turn-key inspection, design, and implementation of bridge repairs
- 2.7 Submarine Pipeline Projects
  - 2.7.1 Internal Inspection (by in-line intelligent tools) of submarine pipelines
  - 2.7.2 Design and installation of repair or replacement of fuel loading and offloading marine terminals
  - 2.7.3 Inspection and testing of cargo loading hoses
  - 2.7.4 Design and Installation of repair or replacement of cargo loading and offloading components such as manifolds, underbouy hoses, anchors, supports, etc.
  - 2.7.5 Submarine pipeline purging, decommissioning, and recommissioning.
  - 2.7.6 Verify pipeline compliance with state and federal regulations.

### 3.0 REQUIREMENTS

#### 3.1 The Contractor Shall:

- 3.1.1 Provide specified services of the type described in section 2 of this Statement of Work, which meet the requirements of this contract and the individual delivery orders issued hereunder.
- 3.1.2 Travel to various government activities and other locations as required by individual delivery orders to perform project planning, design, analysis, fabrication, inspection, installation, construction, maintenance and repair of mooring and cable projects. Travel will include selected project sites worldwide. Travel to project sites may be required as part of several tasks anticipated during the period of this contract. Travel requirements may include travel and work aboard Government, Government-contracted or contractor-supplied floating platforms or ships. Program reviews may be held in Washington, DC, Port Hueneme CA, or at other U.S. locations. The Contractor may be required to attend program reviews as stipulated in individual delivery orders.
- 3.1.3 Assume custody of Government Furnished Property (GFP) and provide for proper use, storage, and maintenance as required by FAR 52.245-5. Return GFP as scheduled and identify and report damaged or missing items. Provide property reporting for any specialty mooring or cable system materials stored at contractor's facilities.
- 3.1.4 Arrange and or furnish transportation of GFP and other project materials ot the project site
- 3.1.5 Attend in-process reviews held at contractor's facility, project site, Washington Navy Yard building 218, or other locations. When in-process reviews are held at the contractor's facility, the contractor shall provide, when specified in individual delivery orders, facilities (such as meeting space, inspection areas, field offices, etc.), and equipment. All documentation in-process shall be provided for review.
- 3.1.6 Provide progress reports, financial reports, technical reports, drawings, and other plans, manuals, or documentation of a nature and frequency as specified by the contract and individual delivery orders.

#### 3.2 The Government Shall:

- 3.2.1 Provide definitive requirements for work as specified by individual delivery orders.
- 3.2.2 Provide technical clarification of delivery order requirements.
- 3.2.3 Identify, provide, and monitor Contractor control of Government Furnished Property and Information (GFP/GFI), including computer programs and appropriate users manuals.
- 3.2.4 Provide access to Government facilities, personnel, documents, and publications considered essential to the Contractor's effort under the contract.
- 3.2.5 Facilitate all in-process reviews either at the Contractor's facility or at Government facilities as necessary to monitor the Contractor's performance and provide comments and recommendations for the Contractor's use in finalizing services and deliverables.

3.3 Schedule. Delivery schedules will be defined in each individual delivery order issued hereunder.

#### **4.0 FACILITIES**

The services required under this contract (see Section 2.0) will usually be performed at the contractor's facilities or a field site. The contractor's facilities exclusive of fabrication facilities, shall have a SECRET facility. The contractor shall have the capability to prepare or modify documents and drawings using AUTOCAD, , and Windows version of MICROSOFT WORD, MICROSOFT EXCEL, MICROSOFT ACCESS MICROSOFT PROJECT, and MICROSOFT POWERPOINT. The nature of the tasking under this contract will require rapid response and repeated visits to the Naval Facilities Engineering Services Center, Ocean Construction Division which is located at the Washington Navy Yard, Washington, DC.